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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,724	09/15/2003	Sachin Garg	630-044US	1503

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EXAMINER	
SIKRI, ANISH	
ART UNIT	PAPER NUMBER
2143	
MAIL DATE	DELIVERY MODE
07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/662,724	GARG ET AL.	
	Examiner	Art Unit	
	Anish Sikri	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/15/2003, 12/27/04, 3/10/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement submitted on 9/15/2003, 12/27/2004, and 3/10/2006 been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-12** are rejected under 35 U.S.C. 102(b) as being unpatentable over Lyon et al (US Pat 6,333,917).

Consider **Claim 1**, Lyon et al clearly discloses the method of receiving a first plurality of protocol data units at a first input (Lyons et al Col 3, Lines 59-62) of a protocol-data-unit excisor (Lyons et al, Col 3 Line 58), wherein all of the protocol data units received at said first input (Lyons et al Col 3, Lines 59-62) are en route to a first congestible node (Lyons et al, Col 6, Lines 7-19); receiving at a said protocol-data-unit excisor (Lyons et al, Col 3 Line 58) a metric of a queue (Lyons et al, Col 14, Lines 55-65) in a said first congestible node (Lyons et al, Col 6, Lines 7-19); and selectively dropping (Lyons et al, Col 6, Lines 25-30), at said protocol-data-unit excisor (Lyons et al, Col 3 Line 58), one or more of said first plurality of protocol data units based on said metric of said queue (Lyons et al, Col 14, Lines 55-65) in said first congestible node

(Lyons et al, Col 6, Lines 7-19). Lyon et al clearly shows on how packets are transmitted over the network from multiple number of sources while on route to the node(s), during the transmission the packets go through the switch before reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Consider **Claim 2**, Lyon et al clearly discloses the method of claim 1 wherein said protocol data unit excisor (Lyons et al, Col 3 Line 58) decides whether to drop a protocol data unit (Lyons et al, Col 6, Lines 25-30) based on Random Early Detection (Lyons et al, Col 1, Line 10, Col 6, Lines 50-60). Lyon et al clearly shows on the use of Random Early Detection in its switch for controlling congestion of packets passing through the network.

Consider **Claim 3**, Lyon et al clearly discloses the method of claim 1 wherein receiving a second plurality of protocol data units at a second input (Lyons et al Col 3, Lines 59-62) of said protocol data unit excisor (Lyons et al, Col 3 Line 58), wherein all of the protocol data units received at said second input (Lyons et al Col 3, Lines 59-62) are en route to a second congestible node (Lyons et al, Col 6, Lines 7-19); receiving at said protocol data unit excisor (Lyons et al, Col 3 Line 58) a metric of a queue (Lyons et al, Col 14, Lines 55-65) in a said second congestible node (Lyons et al, Col 6, Lines 7-19); and selectively dropping (Lyons et al, Col 6, Lines 25-30), at said protocol data unit excisor (Lyons et al, Col 3 Line 58), one or more of said second plurality of protocol data

units based on said metric of said queue (Lyons et al, Col 14, Lines 55-65) in said second congestible node (Lyons et al, Col 6, Lines 7-19). Lyon et al clearly shows on how packets are transmitted over the network from multiple number of sources while on route to the respective node(s), during the transmission the packets go through the switch before reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Consider **Claim 4**, Lyon et al clearly discloses protocol data unit excisor (Lyons et al, Col 3 Line 58) comprising: a first input (Lyons et al Col 3, Lines 59-62) for receiving a first plurality of protocol data units, wherein all of the protocol data units received at said first input (Lyons et al Col 3, Lines 59-62) are en route to a first congestible node (Lyons et al, Col 6, Lines 7-19) a second input (Lyons et al Col 3, Lines 59-62) for receiving a metric of a queue (Lyons et al, Col 14, Lines 55-65) in a said first congestible node (Lyons et al, Col 6, Lines 7-19); and a processor for selectively dropping (Lyons et al, Col 6, Lines 25-30), one or more of said first plurality of protocol data units based on said metric of said queue (Lyons et al, Col 14, Lines 55-65) in said first congestible node (Lyons et al, Col 6, Lines 7-19). Lyon et al clearly shows on how packets are transmitted over the network from multiple number of sources while on route to the respective node(s), during the transmission the packets go through the switch (protocol data unit excisor) before reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Consider **Claim 5**, Lyon et al clearly discloses the protocol data unit excisor (Lyons et al, Col 3 Line 58) of claim 4 wherein said protocol-data-unit excisor (Lyons et al, Col 3 Line 58) decides whether to drop a protocol data unit (Lyons et al, Col 6, Lines 25-30) based on Random Early Detection (Lyons et al, Col 1, Line 10, Col 6, Lines 50-60). Lyon et al clearly shows on the use of Random Early Detection in its switch for controlling congestion of packets passing through the network.

Consider **Claim 6**, Lyon et al clearly discloses the protocol-data-unit excisor (Lyons et al, Col 3 Line 58) of claim 4 further comprising: a third input (Lyons et al Col 3, Lines 59-62) for receiving a second plurality of protocol data units, wherein all of the protocol data units received at said third input (Lyons et al Col 3, Lines 59-62) are en route to a second congestible node (Lyons et al, Col 6, Lines 7-19); a fourth input receiver (Lyons et al Col 3, Lines 59-62) for receiving a metric of a queue (Lyons et al, Col 14, Lines 55-65) in a said second congestible node (Lyons et al, Col 6, Lines 7-19); and a wherein said processor is also for selectively dropping (Lyons et al, Col 6, Lines 25-30), one or more of said second plurality of protocol data units based on said metric of said queue (Lyons et al, Col 14, Lines 55-65) in said second congestible node (Lyons et al, Col 6, Lines 7-19). Lyon et al clearly shows on how packets are transmitted over the network from multiple number of sources while on route to the respective node(s), during the transmission the packets go through the switch (protocol data unit excisor)

before reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Consider **Claim 7**, Lyon et al clearly discloses the method of receiving a first plurality of protocol data units at a first input (Lyons et al Col 3, Lines 59-62) of a protocol-data-unit excisor (Lyons et al, Col 3 Line 58), wherein all of the protocol data units received at said first input (Lyons et al Col 3, Lines 59-62) are en route to a first congestible node (Lyons et al, Col 6, Lines 7-19); estimating in said protocol-data-unit excisor (Lyons et al, Col 3 Line 58) a first metric of a first queue (Lyons et al, Col 14, Lines 55-65) of protocol data units in said first congestible node (Lyons et al, Col 6, Lines 7-19) based on said first plurality of protocol data units; and selectively dropping (Lyons et al, Col 6, Lines 25-30), at said protocol-data-unit excisor (Lyons et al, Col 3 Line 58), one or more of said first plurality of protocol data units en route to said first congestible node (Lyons et al, Col 6, Lines 7-19) based on said first metric (Lyons et al, Col 14, Lines 55-65). Lyon et al clearly shows the method on how packets are transmitted over the network from multiple number of sources while on route to the respective node(s), during the transmission the packets go through the switch (protocol data unit excisor) before reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Consider **Claim 8,** Lyon et al clearly discloses the method of claim 7 wherein said protocol-data-unit excisor (Lyons et al, Col 3 Line 58) decides whether to drop a protocol data unit (Lyons et al, Col 6, Lines 25-30) based on Random Early Detection (Lyons et al, Col 1, Line 10, Col 6, Lines 50-60). Lyon et al clearly shows on the use of Random Early Detection in its switch for controlling congestion of packets passing through the network.

Consider **Claim 9**, Lyon et al clearly discloses the method of claim 7 further comprising receiving a second plurality of protocol data units at a second input (Lyons et al Col 3, Lines 59-62) of said protocol data unit excisor (Lyons et al, Col 3 Line 58), wherein all of the protocol data units received at said second input (Lyons et al Col 3, Lines 59-62) are en route to a second congestible node (Lyons et al, Col 6, Lines 7-19); estimating in said protocol data unit excisor (Lyons et al, Col 3 Line 58) a second metric of a second queue (Lyons et al, Col 14, Lines 55-65) of protocol data units in said second congestible node (Lyons et al, Col 6, Lines 7-19) based on said second plurality of protocol data units; and selectively dropping (Lyons et al, Col 6, Lines 25-30), at said protocol data unit excisor (Lyons et al Col 3, Lines 59-62), a one or more of said second plurality of protocol data units en route to said second congestible node (Lyons et al, Col 6, Lines 7-19) based on said second metric (Lyons et al, Col 14, Lines 55-65). Lyon et al clearly shows the method on how packets are transmitted over the network from multiple number of sources while on route to the respective node(s), during the transmission the packets go through the switch (protocol data unit excisor) before

reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Consider **Claim 10**, Lyon et al clearly discloses a protocol-data-unit excisor (Lyons et al, Col 3 Line 58) comprising: a first input (Lyons et al Col 3, Lines 59-62) for receiving a first plurality of protocol data units, wherein all of the protocol data units received at said first input (Lyons et al Col 3, Lines 59-62) are en route to a first congestible node (Lyons et al, Col 6, Lines 7-19); and a processor for estimating a first metric of a first queue of protocol data units in said first congestible node (Lyons et al, Col 6, Lines 7-19) based on said first plurality of protocol data units, and for selectively dropping (Lyons et al, Col 6, Lines 25-30) one or more of said first plurality of protocol data units en route to said first congestible node (Lyons et al, Col 6, Lines 7-19) based on said first metric (Lyons et al, Col 14, Lines 55-65). Lyon et al clearly shows the method on how packets are transmitted over the network from multiple number of sources while on route to the respective node(s), during the transmission the packets go through the switch (protocol data unit excisor) before reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Consider **Claim 11**, Lyon et al clearly discloses the method of claim 10 wherein protocol data unit excisor (Lyons et al, Col 3 Line 58) decides whether to drop a protocol data unit (Lyons et al, Col 6, Lines 25-30) based on Random Early Detection (Lyons et

al, Col 1, Line 10, Col 6, Lines 50-60). Lyon et al clearly shows on the use of Random Early Detection in its switch for controlling congestion of packets passing through the network.

Consider **Claim 12**, Lyon et al clearly discloses the protocol-data-unit excisor (Lyons et al, Col 3 Line 58) of claim 10 further comprising: a second input (Lyons et al Col 3, Lines 59-62) for receiving a second plurality of protocol data units, wherein all of the protocol data units received at said second input (Lyons et al Col 3, Lines 59-62) are en route to a second congestible node (Lyons et al, Col 6, Lines 7-19); and a processor for estimating a second metric of a second queue (Lyons et al, Col 14, Lines 55-65) of protocol data units in said second congestible node (Lyons et al, Col 6, Lines 7-19) based on said second plurality of protocol data units, and for selectively dropping (Lyons et al, Col 6, Lines 25-30) one or more of said second plurality of protocol data units en route to said second congestible node (Lyons et al, Col 6, Lines 7-19) based on said second metric (Lyons et al, Col 14, Lines 55-65). Lyon et al clearly shows the method on how packets are transmitted over the network from multiple number of sources while on route to the respective node(s), during the transmission the packets go through the switch (protocol data unit excisor) before reaching the node(s), and within the switch, it calculates based on metrics on whether to drop packets or allow packets to avoid traffic congestion at the node(s).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Sikri whose telephone number is 571-270-1783. The examiner can normally be reached on 8am - 5pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anish Sikri
a.s.
July 5, 2007

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